CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 90 - 033
NPDES PERMIT NO. CA0037842

AMENDMENT OF WASTE DISCHARGE REQUIREMENTS, ORDER NO. 89-012

CITIES OF SAN JOSE AND SANTA CLARA
SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT
SAN JOSE
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

1. The Board adopted Order No. 89-012, reissuing waste discharge requirements for the Cities of San Jose and Santa Clara (hereinafter called the discharger) on January 18, 1989. The Cities discharge tertiary treated effluent from the San Jose/Santa Clara Water Pollution Control Plant into Artesian Slough, tributary to Coyote Creek and South San Francisco Bay.

2. The Basin Plan does not establish water quality objectives and effluent limitations for heavy metals in South San Francisco Bay. The discharger is obligated to perform specific heavy metals and toxicity monitoring studies, and assist in the gathering of data needed for development of site-specific water quality objectives and effluent limitations, to comply with the limitations of the Basin Plan.

3. Interim controls on heavy metals are needed because of the limited assimilative capacity of South San Francisco Bay, despite a more than 50% reduction in annual metals loadings since 1975.

4. Order No. 89-012 specifies interim concentration limits for toxic pollutants, and specifies that the Board will amend the permit before December 31, 1989, to establish performance based interim effluent limits for toxic pollutants as defined in Effluent Limitation B.4. The order also specifies that toxic pollutant mass loadings limits will be set for individual toxic pollutants. Limits shall be determined by using the upper 95% confidence limit, and will rely on additional self-monitoring data collected after adoption of Order No. 89-012. Short-term methods available to the discharger to control toxics levels in effluent include more stringent pre-treatment requirements (industrial user categories, local limits, surveillance, and enforcement) and pilot waste minimization programs.

5. The discharger has complied with all toxic pollutant monitoring and reporting requirements specified in Order No. 89-012. Toxics data submitted by the discharger were used to calculate interim concentration and mass loading limits, using a method that differed from the 95% upper confidence limit because of limitations in the data. Limits were calculated using the 95th percentile value of 1989 measures, which fulfills the intent of Order 89-012. Flow data used in calculating the mass loading limit was a

mean of flows from 1985, 1986, 1987, and 1988. This time period was chosen because it encompassed a more normal rainfall regime than the current drought period.

6. The discharger is currently conducting studies to assess the impacts of heavy metals in South San Francisco Bay. Order 89-012 requires the discharger to submit proposals for further studies on the impacts of heavy metals by February 1, 1990. Because data to best design these studies will not be available until after February 1, 1990, the deadline is extended to July 15, 1990. The discharger is also required to submit results of salt marsh conversion assessment and habitat utilization studies 180 days prior to the next permit re-issuance. This deadline will not allow adequate time for analysis of field survey data collected as part of the studies. This deadline should be extended to 120 days prior to the next permit reissuance.

7. This action to amend an NPDES Permit is exempt from the provision of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

8. The discharger and interested agencies and persons have been notified of the Board's intent to reissue waste discharge requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.

9. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the Clean Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following.

A. Provision B.4.a. of Order No. 89-012 shall be amended as follows:

4. Interim Limits for Toxic Pollutants

a. Prior to permit expiration, the effluent shall not exceed the following interim limits:

Constituent	Annual 95th Percentile(μg/L) (2)
Arsenic	20
Cadmium	2
Chromium(VI)	4
Copper	14
Lead	4
Mercury	0.4
Nickel	16
Silver	4
Zinc	86
Cyanide	40

Phenolic Compounds	5
PAHs(1)	26
Selenium	2

Notes:
(1) Polynuclear aromatic hydrocarbons
(2) In calculating compliance, the discharger will count all non-detect measures at the detection level. The discharger will measure compliance with the 95th percentile limit once each calendar year. The 95th percentile value is the highest concentration measured during the year after removing the top 5% of the results for the year (i.e., use the greatest value for sample size n = 1 to 19, second greatest value for n = 20 to 39, and third greatest value for n = 40 to 59). After 5% of the yearly measures for any toxin have exceeded the interim limit, each additional exceedance will constitute a violation for the measurement period of that toxin (e.g., metals measurements are taken weekly, thus each exceedance after the 5% allowed will be counted as one week of violation). The Board may review compliance before the end of the calendar year if it observes a pattern of exceedances that suggest the annual limit will be exceeded.

B. Provision B.4.b is hereby amended as follows:

b. The intent of the interim limits is to maintain ambient receiving water conditions in the South Bay until site specific objectives and effluent limits are developed. Performance-based interim limits should prevent significant increases in discharge of toxics over current levels. When reviewing any non-compliance with these interim concentration limits, the Board will consider each pollutant separately and will consider trends in increasing pollutant concentration more seriously than isolated occurrences. Because effluent toxics concentrations may be affected by heavy rainfall years, and wet year data were not considered in the development of these limits, exceedances during wet weather events will also be evaluated individually. Site specific limits to be developed by December 31, 1991, may be higher or lower than the interim limits.

C. Provision B.5., first paragraph, shall be amended as follows:

During the period in which interim limits are in effect, the discharger should investigate waste-minimization and source controls in preparation for potentially more stringent site-specific limits. The following final effluent limits for toxic pollutants will become effective on December 21, 1991, unless the Regional Board establishes alternative limits based on site-specific studies:

D. Provisions B.6.a and B.6.b of Order 89-012 shall be amended as follows:

6. Toxic Pollutant Mass Loadings

a. Prior to permit expiration, the effluent mass loading shall not exceed the following interim limits:

Constituent	Annual Average(lbs/year)(1)
Arsenic	4984
Cadmium	534
Chromium(VI)	1068
Copper	4094
Lead	1068
Mercury	107
Nickel	4984
Silver	1246
Zinc	26700
Cyanide	14240
Phenolic Compounds	1424
PAHs	6942
Selenium	712

(1) In calculating compliance the discharger will count all non-detect measures at the detection level. Mass loading should be calculated for each analytical result (e.g., for weekly measures, calculate loadings weekly using weekly-average flow data), and calculate a total load at the end of each year.

b. The intent of the interim mass loading limits is to maintain ambient receiving water conditions in the South Bay until site specific objectives and effluent limits are developed. Performance-based interim limits should prevent significant increases in discharge of toxics over current levels. When reviewing non-compliance with these interim mass loading limit, the Board will consider each pollutant separately and will consider trends in increasing pollutant concentration more seriously than isolated occurrences. Because effluent toxics concentrations may be affected by heavy rainfall years, and wet year data were not considered in the development of these limits, exceedances during high rainfall years will also be evaluated individually. Site specific limits to be developed by December 31, 1991, may be higher or lower than interim mass loading limits.

E. Provision E.3, page 9, line 13, shall be amended to change the words "180 days" to "120 days."

F. Provision E.5.d, page 11, line 10, shall be amended to change "February 1, 1990" to "July 15, 1990."

G. The Self-Monitoring Progam, Part B, page 7, shall be modified to add the following requirement:

7. If any effluent sample is in violation of interim toxics limits, sampling shall be increased for that toxic to daily for at least seven days, and until compliance with the limits has been demonstrated for three successive samples. All additional monitoring results shall be reported in the monthly monitoring reports. The discharger shall also increase pretreatment and source control efforts to determine the source of the increased toxins levels.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 21, 1990.

Steven R. Ritchie
Executive Officer